

# Yufan Cai

Shanghai Jiao Tong University, Shanghai, 200240, P. R. China

(+65)82915771      gluttony@sjtu.edu.cn

## EDUCATION

**IEEE Honored Class, Shanghai Jiao Tong University (SJTU), Shanghai, China**

2016.09 - present

**B.Eng. in Computer Science and Artificial Intelligence**

GPA (Main course): 87.4/100 (3.63/4.0)

Comprehensive score (in second year): 93.98/100, ranked 2/91 (in third year): 90.5/100, ranked 8/91

Core Courses: Machine Learning (GPA:4.0/4.0), Artificial Intelligence (GPA:4.0/4.0), Data Mining Techniques (GPA:4.0/4.0)

## SELECTED AWARDS

- **Huawei Scholarship**, Huawei, 2018 *selective scholarship, top 3% in one department*
- **Huichuan Scholarship**, Huichuan, 2019 *selective scholarship, top 5% in one department*
- **Level B Scholarship**, Shanghai Jiao Tong University, 2018, 2019 *selective scholarship, top 10% in one department*
- **Meritorious Winner**, COMAP's Mathematical Contest in Modeling (MCM), 2017 *top 10% in all participants*
- **Excellent Volunteer**, Shanghai Jiao Tong University, 2018 *10 students in one year*

## RESEARCH EXPERIENCES

**NLP Team** | Institute of Data Science, National University of Singapore | Academic Visitor

2019.07 – 2019.12(expected)

Supervisor: See-Kiong Ng, PhD in CMU, professor at Institute of Data Science, National University of Singapore

- Draft a paper “Graph Convolution for Open Information Extraction”, which utilizes pruned dependency tree as extra information to feed to GCN architecture
- Survey on supervised learning method for Information Extraction, using a novel viewpoint from question answering on the interrelation and difference among the four tasks: relation extraction, relation-limited relation extraction, open information extraction and relation-fixed information extraction
- Construct an article-level dataset for relation-fixed IE by automatically controverting a released large dataset DocRED
- Work for a Gallery Bot Project<sup>1</sup> which seeks to develop an intelligent data-driven engine for recommendation of artworks and generation of customized dialog flows

**Student Innovation research** | Shanghai Jiao Tong University | Programmer Team Leader

2019.01 – 2020.06(expected)

Supervisor: Haibing Shu, PhD in UVA, professor at Antai College of Economics & Management, Shanghai Jiao Tong University

- Work for Web Scraping on the ZhiWang, the largest paper database in China
- Detect and report academic fraud and develop Chinese language processing tools for paper plagiarism

**NLP Team** | Shanghai Jiao Tong University | Team member

2018.06 – 2018.12

Supervisor: Weijia Jia, professor at Dept. of Computer Science and Engineering, Shanghai Jiao Tong University

- Use Stanford CoreNLP tools to build domain-specific knowledge maps for OpenIE schema
- Research on Relation Extraction and built a hierarchical relations encoder-decoder model

## PROJECT EXPERIENCES

- Malicious Detection for Social Network using Graph Neural Network and Generative adversarial network
- Chinese Word Segmentation System
- Design and Implementation of Convolutional Neural Network Acceleration Based on FPGA
- Multiclass, Multilabel Image Classification for biological cell image
- Stock Price Prediction and Trading Strategy Design in Financial Transaction

## LEADERSHIP AND ACTIVITIES

**Shanghai Jiao Tong Volunteer Union** | Director of Information Center

2017.04 – 2018.08

- Responsible for drafting Volunteer Union policies and Volunteer Performance Measurement System
- Awarded as Top 10 Excellent Volunteer in University

**Social Practice** | Team Leader

2017.06 – 2017.09

- Recruit more than 100 students and organized nationwide social surveys
- Achieve national attention and awarded as Best Social Practice in the National Social Practice Competition

<sup>1</sup> <http://ids.nus.edu.sg/research-projects.html>

## **SKILLS**

---

Three years part-time job experience as a teacher in High School Education

Best TOEFL grade: Total 104 (Reading 29, Listening 26, Speaking 23, Writing 26)